

## **ABSTRACT**

Mapper is a topological data analytic tool that extracts high dimensional data sets in the form of simplicial complexes. Over the last several weeks, the Farmington students have been conducting a robustness analysis of a specific R implementation of Mapper. Using data sets of known topology generated by manifold samplers they implemented, they have been testing Mapper's robustness and reproducibility in being able to retrieve topological features from point cloud data sets.

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